



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/600,275 | 06/20/2003 | Stephen P. Norton | 00775CON | 6349 |

26285 7590 02/17/2004

KIRKPATRICK & LOCKHART LLP
535 SMITHFIELD STREET
PITTSBURGH, PA 15222

| |
|----------|
| EXAMINER |
|----------|

TAYLOR, APRIL ALICIA

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2876

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/600,275 | NORTON, STEPHEN P. | |
| | Examiner | Art Unit | |
| | April A. Taylor | 2876 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22,23,29-36,40 and 42-52 is/are rejected.
- 7) ☒ Claim(s) 24-28,37-39 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6/03;11/03 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of the Preliminary Amendment filed 20 June 2003.

Claim Objections

2. Claims 24-28, 34, 38-42, and 45 are objected to because of the following informalities:

Re claim 24: Insert – to – after “a portable power supply coupled” (see line 3).

Re claims 24-28: The examiner believes that the preamble should read “The smart card system” because the limitation following the preamble describes a system and not an apparatus.

Re claim 34: Substitute “second electronic processor” with – first electronic processor – (see line 4).

Re claims 38 and 39: The examiner believes that claims 38 and 39 should depend on claim 37 and not claim 36.

Re claims 39-41: Insert -- system – after “The optical smart card” (see line 1).

Re claim 41: Substitute “the portable power supply” with – a portable power supply – (see line 3).

Re claim 42: Substitute “processors” with -- electronic processors -- (see line 2).

Re claim 45: Substitute “an optical communication transaction” with – an optical communication transmission – (see line 3).

Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 22, 23, 29-35, and 44-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-7, 12, 14, and 16 of U.S. Patent No. 6,604,685 (hereinafter '685). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claimed invention is a broader recitation of the '685 Patent. For example, in claims 22, 23, 29, and 30 of the present claimed invention and claim 1, 4, and 5 of the '685 Patent, the Applicant claim:

A smart card comprising an optical transceiver (see col. 14, lines 22-24); an electronic processor in communication with the optical transceiver (see col. 14, lines 25-26); an antenna in communication with the optical transceiver (see col. 14, line 28); wherein the optical transceiver initiates optical transmission upon the antenna receiving an electromagnetic signal (see col. 14, lines 34-36); a power converter coupled to the

Art Unit: 2876

antenna, wherein the power converter is for providing an output voltage to the electronic processor in response to the electromagnetic signal (see col. 14, lines 29-33); wherein the electronic processor comprises a CPU, a memory circuit, and an input/output controller (see col. 14, lines 41-45); and wherein the memory circuit is selected from the group consisting of a ROM, NVM and RAM (see col. 14, lines 46-48).

Re claims 31-33 of the present claimed invention and claims 6 and 7 of the '685 Patent, the Applicant claim:

A smart card reader comprising an optical transceiver, wherein the optical transceiver is enabled to receive optical communication from an optical smart card upon the antenna transmitting an electromagnetic signal and wherein the optical transceiver is located on a computer screen (see col. 14, lines 49-62); an electronic processor in communication with the optical transceiver (see col. 14, lines 55-57); an antenna in communication with the optical transceiver (see col. 14, lines 58-62); and an oscillator coupled to the antenna and to a power supply, wherein the oscillator is for generating the electromagnetic signal at a first frequency (see col. 14, lines 63-67).

Re claims 34-35 and 44-49 of the present claimed invention and claims 12, 14, and 16 of the '685 Patent, the Applicant claim:

An optical smart card system comprising:

an optical smart including a first optical transceiver; a first electronic processor in communication with the first optical transceiver; and first antenna in communication with the first optical transceiver (see col. 15, lines 11-15);

an optical smart card reader including a second optical transceiver;
a second electronic processor in communication with the second optical transceiver; and a second antenna in communication with the second optical transceiver (col. 15, lines 16-31);

wherein the first optical transceiver initiates optical transmission upon the first antenna receiving an electromagnetic signal from the second antenna (see col. 15, lines 16-31);

wherein the second optical transceiver is enabled to receive optical communication from the first optical transceiver upon the second antenna transmitting the electromagnetic signal (see col. 15, lines 16-31);

an external power supply for transmitting electromagnetic signals to the optical smart card for energizing the optical smart card (see col. 15, lines 35-38);

and wherein the optical smart card reader transmits the electromagnetic signal to the optical smart card for energizing the optical smart card and initiating an optical communication transaction between the optical smart card and the optical smart card reader (see col. 16, lines 1-5).

Thus, in respect to the above discussions, it would have been obvious to an artisan at the time the invention was made to use the teachings of the '685 Patent as a general teaching for an optical smart card system and differ only in terminology and/or are broader in scope.

Art Unit: 2876

5. Claims 47-52 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 39-41 and 51-52 of copending Application No. 09/897,235 (hereinafter '235). Although the conflicting claims are not identical, they are not patentably distinct from each other because both the present claimed invention and the '235 Application are claiming common subject matter such as a method of transacting information in a smart card system including a smart card reader and a smart card comprising transmitting an electromagnetic power signal to the smart card (see pg 5, claim 39); initiating communication between the smart card and the smart card reader upon the smart card receiving the electromagnetic power signal (see pg 5, claim 39); transmitting an electromagnetic signal from the smart card reader (see pg 5, claim 40); transmitting an electromagnetic signal from an external power supply (see pg 6, claim 41); generating a first electromagnetic signal having a first frequency (see pg 5, claim 39); radiating the first electromagnetic signal to the smart card tuned to the first frequency from a portable power supply ohmically detached from the smart card (see pg 5, claim 39); receiving a second electromagnetic signal (see pg 7, claim 51); enabling the wireless radiating of the first electromagnetic signal upon receiving the second electromagnetic signal (see pg 7, claim 51); and enabling the wireless radiating of the first electromagnetic signal upon receiving a signal from a switch contact closure (see pg 7, claim 52).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 22, 23, 29-32, 34-36, 40, 42-45, 47, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Englehardt (US 5,196,682).

Re claims 22, 23, 29-32, 34-36, 40, 42-45, 47, and 48: Englehardt teaches an optical card system comprising:

an optical card 10 including a first optical transceiver 24; a first electronic processor in communication with the first optical transceiver 24; and a first antenna 18 in communication with the first optical transceiver 24;

an optical card reader 14 including a second optical transceiver 26; a second electronic processor 28; a second antenna 20; an oscillator 22 coupled to the antenna 20 and to a power supply, wherein the oscillator is for generating the electromagnetic signal at a first frequency; and wherein the first optical transceiver 24 initiates optical transmission upon the first antenna 18 receiving an electromagnetic signal from the second antenna 20;

wherein the second optical transceiver 26 is enabled to receive optical communication from the first optical transceiver 24 upon the second antenna 20 transmitting the electromagnetic signal;

Art Unit: 2876

a power converter coupled to the first antenna 18, wherein the power converter is for providing an output voltage to the electronic processor in response to the electromagnetic signal;

a housing with a retainer for receiving the optical card 10;

wherein the first and second processors comprise a CPU; a memory circuit, wherein the memory circuit is a RAM memory circuit; and an input/output controller; and

wherein the optical card reader 14 transmits the electromagnetic signal to the optical card 10 for energizing the optical card 10 and initiating an optical communication transmission between the optical card and the optical card reader. (See figures 1, 2, 5, and 7; col. 2, lines 20-61); col. 3, line 50 to col. 7, line 58)

Allowable Subject Matter

8. Claims 24-28, 37-39, and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, taken alone or in combination, fail to teach or fairly suggest an optical card system comprising, among other things, a portable power supply coupled to a second antenna, wherein the portable power supply is for communicating electromagnetic energy to a first antenna upon the second antenna

receiving the electromagnetic signal; a battery ohmically detached from the card; and an oscillator in communication with the battery and the second antenna.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rapeli (US 6,202,932) discloses a smart card system; and Popovic (US 4,742,573) discloses an identification card including optically powered electronic circuit.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to April A. Taylor whose telephone number is (571) 272-2403. The examiner can normally be reached on Monday - Friday from 6:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [april.nowlin@uspto.gov].


All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the

Art Unit: 2876

Interim Internet Usage Policy published in the official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


April A. Taylor
January 23, 2004


KARL D. FRECH
PRIMARY EXAMINER